EL PASO FIELD SERVICES
PRODUCTION PIT CLOSURE

DEPUTY OIL & GAS INSPECTOR

DEC 2 1 1998

Approved

HUERFANO UNIT #19
Meter/Line ID - 92985

RECEIVED
JUL 2 1998
OIL CON. DIV.
DIST. 3

SITE DETAILS

Legals - Twn: 26 **Rng:** 10 **Sec:** 05 **Unit:** B
NMOCD Hazard Ranking: 40 **Land Type:** 2 - Federal
Operator: MERIDIAN OIL INC **Pit Closure Date:** 09/08/94

RATIONALE FOR RISK-BASED CLOSURE:

The above mentioned production pit was assessed and ranked according to the criteria in the New Mexico Conservation Division's Unlined Surface Impoundment Closure Guidelines.

The primary source, discharge to the pit, has been removed. There has been no discharge to the production pit for at least five years and the pit has been closed for at least three years.

The production pit has been remediated to the practical extent of the trackhoe or to the top of bedrock. Initial laboratory analysis has indicated that the soil remaining at the bottom of the excavation is above standards based on the hazard ranking score. Contaminated soil was removed and transported to an approved landfarm for disposal. The initial excavation was backfilled with clean soil and graded in a manner to divert precipitation away from the excavated area. Any rainfall that does infiltrate the ground surface must migrate through clean backfill before reaching any residual hydrocarbons remaining in the soil. Therefore, further mobility of residual hydrocarbons is unlikely.

Since the soil samples from the initial excavation were above standards, a test boring was drilled and a sample was collected to evaluate the vertical extent of impact to soils. Test boring sample results indicated soils below standards beneath the original excavation.

El Paso Field Services Company (EPFS) requests closure of the above mentioned production pit location for the following reasons:

- Discharge to the pit has not occurred in over five years and the pit has been closed for over three years.
- The bulk of the impacted soil was removed during the initial excavation.
- The excavation was backfilled with clean soil and graded to divert precipitation away from the excavation area.
- All source material has been removed from the ground surface, eliminating potential direct contact with livestock and the general public.
- Groundwater was not encountered in the initial excavation or test boring; therefore, impact to groundwater is unlikely.
- Soil samples collected beneath the initial excavation were below standards.
- No potential receptors are within 1,000 feet of the site.
- Residual hydrocarbons remaining in the soil at the bottom of the initial excavation will naturally degrade in time with minimal risk to the environment.

FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 92985 Location: Huerfano Unit No. 19
Operator #: 2999 Operator Name: MOI P/L District: Angel Peak
Coordinates: Letter: B Section 5 Township: 26 Range: 10
Or Latitude _____ Longitude _____
Pit Type: Dehydrator ✓ Location Drip: ___ Line Drip: ___ Other: _____
Site Assessment Date: 8/22/94 Area: 01 Run: 53

SITE ASSESSMENT

NMOCD Zone: (From NMOCD Maps)
Inside ☒ (1)
Outside ☐ (2)

Land Type:
BLM ☒ (1)
State ☐ (2)
Fee ☐ (3)
Indian _____

Depth to Groundwater
Less Than 50 Feet (20 points) ☒ (1)
50 Ft to 99 Ft (10 points) ☐ (2)
Greater Than 100 Ft (0 points) ☐ (3)

Wellhead Protection Area :
Is it less than 1000 ft from wells, springs, or other sources of fresh water extraction? , or ; Is it less than 200 ft from a private domestic water source? ☐ (1) YES (20 points) ☒ (2) NO (0 points)

Horizontal Distance to Surface Water Body
Less Than 200 Ft (20 points) ☒ (1)
200 Ft to 1000 Ft (10 points) ☐ (2)
Greater Than 1000 Ft (0 points) ☐ (3)
Name of Surface Water Body Kutz Canyon
(Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)
Distance to Nearest Ephemeral Stream ☐ (1) < 100' (Navajo Pits Only)
☐ (2) > 100'

TOTAL HAZARD RANKING SCORE: 40 **POINTS**

REMARKS

Remarks : Redline Book - Meter # not located in book. However, Upper half of Sec. 5 (where meter # should be located) is Inside Zone, V.Z. Topo - Inside 2 pits. Will close 1. Pit Dry

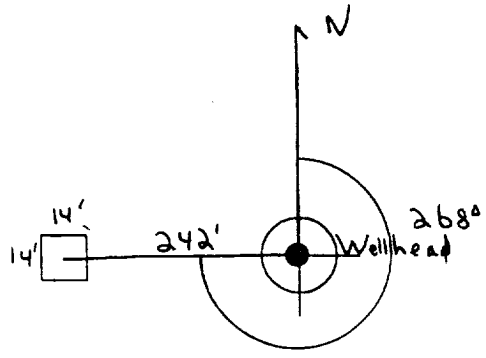
DIG + HAUL

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 268° Footage from Wellhead 242'

b) Length : 14' Width : 14' Depth : 3'



REMARKS

Remarks :

Pictures @ 1449

Completed By:

Corey Chase
Signature

8/22/94
Date

PHASE I
EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 92985 Location: Huerfano Unit #19

Coordinates: Letter: B Section 5 Township: 26 Range: 10

Or Latitude _____ Longitude _____

Date Started : 9-8-94 Run: 01 5'3

FIELD OBSERVATIONS

Sample Number(s): KD 247 _____ _____ _____

Sample Depth: 8' Feet

Final PID Reading 117 ppm PID Reading Depth 8' Feet

	Yes	No
Groundwater Encountered	☐	☒

Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation ☒ Approx. Cubic Yards 20

Onsite Bioremediation ☐

Backfill Pit Without Excavation ☐

Soil Disposition:

Envirotech ☒ ☐ Tierra

Other Facility ☐ Name: _____

Pit Closure Date: 9-8-94 Pit Closed By: JET

REMARKS

Remarks : Excavated pit to 8', Took PID Sample, Closed Pit. Hit Sandstone at 8' feet.

Signature of Specialist: Kenny Davis

(SP3191) 03/16/94

El Paso Natural Gas Company

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KD 247	9416081
MTR CODE | SITE NAME:	92985	N/A
SAMPLE DATE | TIME (Hrs):	9-8-94	1215
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	9/13/94	9/13/94
DATE OF BTEX EXT. | ANAL.:	9/14/94	9/16/94
TYPE | DESCRIPTION:	VC	Lt. Brown Coarse Sand

REMARKS: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	< 0.025	MG/KG	1			
TOLUENE	0.046	MG/KG	1			
ETHYL BENZENE	< 0.025	MG/KG	1			
TOTAL XYLENES	0.11	MG/KG	1			
TOTAL BTEX	0.206	MG/KG				
TPH (418.1)	1551 MW 9/16/94	MG/KG			2.19	28
HEADSPACE PID	117	PPM				
PERCENT SOLIDS	90.7	%				

-- TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 99 % for this sample All QA/QC was acceptable.

Narrative:

AT 1 Results Attached

DF = Dilution Factor Used

Approved By: _____ Date: 10/23/94

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**************************************************
*                    Test Method for             *
*     Oil and Grease and Petroleum Hydrocarbons  *
*                  in Water and Soil             *
*                                                *
*            Perkin-Elmer Model 1600 FT-IR       *
*                  Analysis Report               *
**************************************************
*
 94/09/13  14:12
*
*  Sample identification
 946081
*
*  Initial mass of sample, g
 2.190
*
*  Volume of sample after extraction, ml
 28.000
*
*  Petroleum hydrocarbons, ppm
 155.099
*  Net absorbance of hydrocarbons (2930 cm-1)
 0.031
*
*
*
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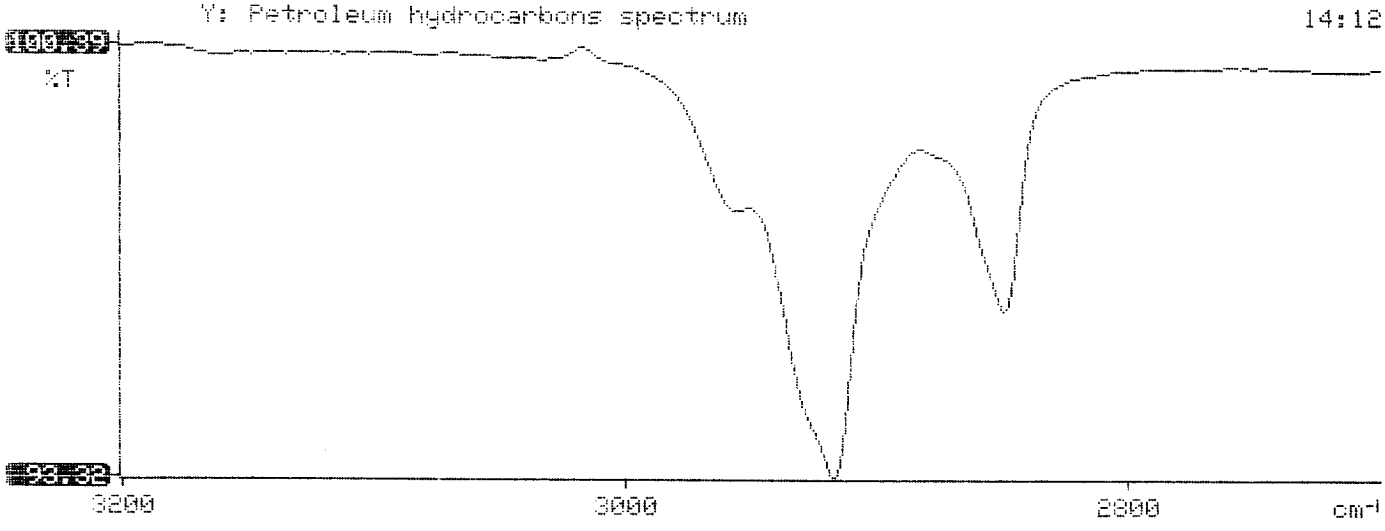

Analytical Technologies, Inc.

2709-D Pan American Freeway, NE Albuquerque, NM 87107
Phone (505) 344-3777 FAX (505) 344-4413

ATI I.D. **409354**

September 22, 1994

El Paso Natural Gas Co.
P.O. Box 4990
Farmington, NM 87499

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On **09/14/94**, Analytical Technologies, Inc., (ADHS License No. AZ0015), received a request to analyze **non-aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

Letitia Krakowski, Ph.D.
Project Manager

MR:jt

Enclosure

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)

CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 409354

PROJECT # : 24324

PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
07	946081	NON-AQ	09/08/94	09/14/94	09/16/94	1
08	946082	NON-AQ	09/08/94	09/14/94	09/16/94	1
09	946083	NON-AQ	09/09/94	09/14/94	09/16/94	1

PARAMETER	UNITS	07	08	09
BENZENE	MG/KG	<0.025	<0.025	<0.025
TOLUENE	MG/KG	0.046	2.0	<0.025
ETHYLBENZENE	MG/KG	<0.025	0.6	<0.025
TOTAL XYLENES	MG/KG	0.11	8.7	0.025
SURROGATE:				
BROMOFLUOROBENZENE (%)		99	87	101

PHASE II

RECORD OF SUBSURFACE EXPLORATION

Borehole # BH-1
Well #
Page 1 of 1

PHILIP ENVIRONMENTAL
4000 Monroe Road
Farmington, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

Project Name EPNG Pits
Project Number 14509 Phase 6000.77
Project Location Huerfano Unit No 19
92985

Elevation
Borehole Location T26, R10, S5, B
GWL Depth
Logged By Jeff W. Kindley
Drilled By G. Suddath
Date/Time Started 08/29/95 1023
Date/Time Completed 08/29/95 1133

Well Logged By Jeff W. Kindley
Personnel On-Site G. Suddath, H Keil, D Roberts
Contractors On-Site
Client Personnel On-Site

Drilling Method 4 1/4 ID HSA
Air Monitoring Method PID, CGI

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: PPM BZ	BH	S/HS	Drilling Conditions & Blow Counts
0				Back Fill material to 12'						
5										
10										
15	1	13-15	.5/2.0	SW, BK medium grained SAND, moist, very dense, hydrocarbon odor					111/114	1043 93 blows per Foot
20	2	18-20	.9/2.0	CL, BR CLAY, dry, hard, low plasticity, hydrocarbon odor.					40/56	1055 100 blows per Foot
25	3	23-25	.8/2.0	CL, GR CLAY, dry, hard, low plasticity, no odor Boring terminated at 25'					23/8	1105 1006 blows per Foot
30										
35										
40										

Comments: Sample collected at 23' to 25' and analyzed For BTEX and TPH. (Sample # 2WK 54), BH grouted to the surface.

Geologist Signature Jeffrey K. Kindley

El Paso Natural Gas Company

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	JWK 54	947361
MTR CODE | SITE NAME:	92985	Huerfano Unit No. 19
SAMPLE DATE | TIME (Hrs):	08-29-95	1105
PROJECT:	Phase II Drilling	
DATE OF TPH EXT. | ANAL.:	8/30/95	
DATE OF BTEX EXT. | ANAL.:	8/30/95	9/5/95
TYPE | DESCRIPTION:	VG	Light grey sand & sand stone

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	< .5	MG/KG				
TOLUENE	< 5	MG/KG				
ETHYL BENZENE	< 5	MG/KG				
TOTAL XYLENES	< 1.5	MG/KG				
TOTAL BTEX	< .3	MG/KG				
TPH (418.1)	47.3	MG/KG			2.21	28
HEADSPACE PID	8	PPM				
PERCENT SOLIDS	92.0	%				

-- TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 93% for this sample All QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used

Date: 9-7-95

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**********************************************************
*                    Test Method for                     *
*      Oil and Grease and Petroleum Hydrocarbons         *
*                    in Water and Soil                   *
*                                                        *
*             Perkin-Elmer Model 1600 FT-IR              *
*                    Analysis Report                     *
**********************************************************
*
 95/08/30  13:49
*
*  Sample identification
 947361
*
*  Initial mass of sample, g
 2.210
*
*  Volume of sample after extraction, ml
 28.000
*
*  Petroleum hydrocarbons, ppm
 47.290
*  Net absorbance of hydrocarbons (2930 cm-1)
 0.017
*
*
*
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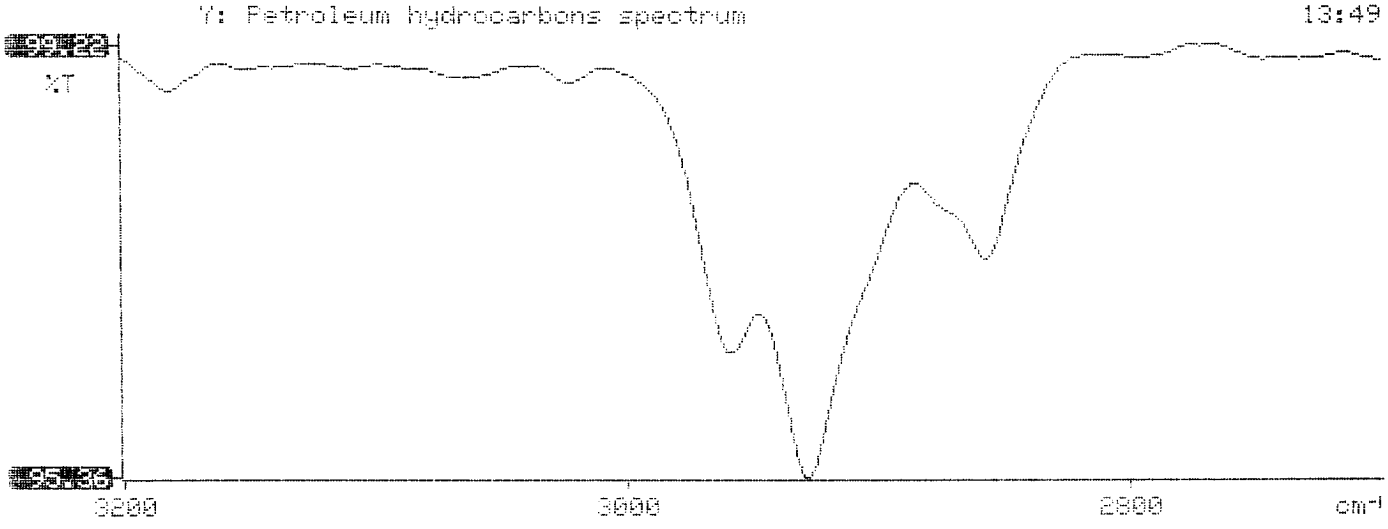

BTEX SOIL SAMPLE WORKSHEET

File	947361	**Date Printed**	9/6/95	
Soil Mass (g)	4.97	**Multiplier (L/g)**	0.00101	
Extraction vol. (mL)	20	**DF (Analytical)**	200	
Shot Volume (uL)	100	**DF (Report)**	0.20121	
				Det. Limit
Benzene (ug/L)	0.00	**Benzene (mg/Kg):**	**0.000**	0.503
Toluene (ug/L)	0.00	**Toluene (mg/Kg):**	**0.000**	0.503
Ethylbenzene (ug/L)	0.00	**Ethylbenzene (mg/Kg):**	**0.000**	0.503
p & m-xylene (ug/L)	0.00	p & m-xylene (mg/Kg):	0.000	1.006
o-xylene (ug/L)	0.00	o-xylene (mg/Kg):	0.000	0.503
		Total xylenes (mg/Kg):	**0.000**	1.509
		Total BTEX (mg/Kg):	**0.000**	

EL PASO NATURAL GAS
EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\090595-1.006
Method : C:\LABQUEST\METHODS\9001.MET
Sample ID : 947361,4.97G,100U
Acquired : Sep 04, 1995 14:22:04
Printed : Sep 04, 1995 14:48:26
User : MARLON

Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	3.390	0	0.0000
a,a,a TFT	4.957	2084084	87.5699
TOLUENE	6.790	194279	-0.3006
ETHYLBENZENE	10.540	0	0.0000
M & P XYLENE	10.903	272042	-2.7633
O XYLENE	11.877	0	0.0000
BFB	13.443	32536306	92.6308